UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,105	03/31/2000	Jean-Claude Sarfati	11345/011001	1758

22511 7590 11/13/2003	EXAMINER
ROSENTHAL & OSHA L.L.P. 1221 MCKINNEY AVENUE SUITE 2800 HOUSTON, TX 77010	LEE, CHRISTOPHER E

ART UNIT	PAPER NUMBER
2189	

DATE MAILED: 11/13/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/540,105	SARFATI, JEAN-CLAUDE
Office Action Summary	Examiner	Art Unit
	Christopher E. Lee	2189

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 October 2003</u>.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,9,13,20-23,25-29,31,34-36,39 and 43-53* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6,9,13,20-23,25-29,31,34-36,39 and 43-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a)☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____.

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.   6)☐ Other: .

DETAILED ACTION

Receipt Acknowledgement

1.   Receipt is acknowledged of the Amendment filed on 6th of October 2003. Claims 1, 39, 44 and 51

have been amended; no claim has been canceled; and no claim has been newly added since the last Office

Action was mailed on 4th of June 2003. Currently, claims 1-4, 6, 9, 13, 20-23, 25-29, 31, 34-36, 39 and

43-53 are pending in this application.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have

been placed of record in the file.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

4.   Claims 9, 44-46, 49 and 51 are rejected under 35 U.S.C. 112, first paragraph, as containing subject

matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In the claim 44, it recites the limitations "formatting the plurality of data loader modules as

respective tables, the tables having the same respective table identification ("TID") and respective

different table identification extensions ("TID-extensions") at a receiver/decoder", and "formatting the

plurality of the software modules as a respective table, the tables having the same respective TID as the

tables of the loader modules associated therewith and respective different TID-extensions at the

receiver/decoder". However, it cannot be enabled in light of the application disclosure (See Application,

page 11, lines 8-16). In fact, said formatting steps of the method claim 44 are performed by means for

formatting in a transmission system, not a receiver/decoder, which is clearly stated on page 11, lines 8-16 of the application. The claims 9, 45, 46 and 49 are dependent claims of the claim 44.

In the claim 51, it recites the limitations "transmitting a second loader included in said bitstream, at a receiver/decoder" in lines 2-3. However, it cannot be enabled in light of the application disclosure because transmitting a second data loader included in said bitstream is at a transmitting system, not at a receiver/decoder (See Application page 9, lines 1-2).

Claim Rejections - 35 USC § 103

5.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6.   Claims 1, 2, 9, 20, 21, 26, 27, 31, 39, 43, 46 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menand et al. [EP 0 680 213 A2; cited by the Applicant; hereinafter Menand'213] in view of Steinberg et al. [US 6,006,039 A; Steinberg].

Referring to claim 20, Menand'213 discloses a receiver/decoder (i.e., AVI receiver/signal decoder; See Fig. 1 and Abstract) comprising: a receiver (i.e., receiver; See col. 2, line 36) for receiving a bitstream (i.e., packet data stream; See col. 1, line 26-28) including software (See col. 6, lines 16-18 and 23-41); storage means (i.e., RAM read/write memory 412 of Fig. 1); and downloading means (i.e., system loader; See col. 2, line 37) for downloading into said storage means a loader (i.e., autostart module; See col. 2, lines 40-43 and col. 7, lines 42-50) for loading said software from said bitstream (See col. 2, line 36 through col. 3, line 2 and col. 7, lines 28-53).

Menand'213 does not expressly teach said loader and said software are in native code (i.e., hardware specific code, which is directly executable by a microprocessor).

Steinberg discloses a method for configuring a camera through external means (Fig. 1), wherein said method sets a loader and a software (an operating system of a camera) through transmitter and receiver (external means), i.e., downloading a native code (i.e., an executable code) for redoing a firmware (i.e.,

patching firmware; See col. 1, lines 61-64; i.e., wherein in fact that said method sets an operating system

of a camera through an external means, i.e., downloading an executable code for redoing a firmware

clearly anticipates that said loader and said software (i.e., downloaded to said receiver/decoder) are in

native code (i.e., directly executable code by Processor 122 of Fig. 4 as a new operating system)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have applied said method of downloading in native code, as disclosed by Steinberg, to said

receiver/decoder system, as disclosed by Menand'213, so as to provide the capability of changing said

loader and said software (i.e., camera operating system) and downloading said loader and said software in

native code (i.e., executable code; See Steinberg, col. 2, lines 47-50) with the advantage of allowing said

loader and said software in said bitstream (i.e., application) to execute faster than if each byte in said bit

stream must interpreted and executed at run-time, which is well know to one of ordinary skill in the art at

the time the invention was made, as shown in Pedersen [US 5,961,586 A] as a prior art of back-up

reference (See Pedersen, col. 11, lines 6-7 and lines 11-13).

Referring to claim 21, Menand'213, as modifies by Steinberg, discloses means for deleting (i.e.,

freeing; See Menand'213, col. 2, line 56) said downloaded data loader (i.e., autostart module;

Menand'213) from said storage means after said software (i.e., application in native code; See

Menand'213, col. 6, lines 16-18 and 23-41; See Steinberg, col. 1, lines 61-64) has been downloaded from

said bitstream (See Menand'213, col. 2, lines 57-58 and col. 7, lines 51-53).

Referring to claim 26, Menand'213 discloses said receiver/decoder is arranged to download

tables (i.e., directory modules; See col. 2, lines 14-17 and lines 36-40).

Referring to claim 27, Menand'213 discloses said downloading means (i.e., system loader) is

arranged to download a table (i.e., a directory module; See col.2, lines 36-40) having a table identification

("TID"; i.e., module identification for directory module) and a predetermined table identification

extension ("TID-extension"; i.e., module identification for code/data module; See directory module 326

and module 328 in Fig. 4) so as to download a directory table (i.e., directory module; See col. 2, lines 14-17 and lines 36-38 and col. 7, lines 28-38), to determine from the content of said directory table said TID-extensions of module tables (See col. 14, lines 4-10), and to download said module tables (See col. 14, lines 20-23) having the same TID (i.e., the same directory module identification; See col. 14, lines 41-44) as that of said downloaded directory table (i.e., directory module) and TID-extensions (e.g., code module identifier) determined from said downloaded directory table (See directory module 326 and module 328 in Fig. 4) so as to download said loader (e.g., code module). Refer to col. 13, line 9 through col. 15. line 1.

Referring to claim 31, Menand'213, as modifies by Steinberg, discloses said downloading means (i.e., system loader; Menand'213) is arranged to download a second loader (i.e., new code module; See Menand'213, col. 7, lines 49-51) included in said software (i.e., application in native code; See Menand'213, col. 6, lines 16-18 and 23-41; See Steinberg, col. 1, lines 61-64) included in said bitstream (i.e., packet data stream; Menand'213) for downloading one of said first-mentioned loader (i.e., autostart module; Menand'213) and said software.

Referring to claim 39, Menand'213 discloses a signal (i.e., AVI signal; See col. 1, lines 26-28) including at least one loader (i.e., autostart module) for loading a software (i.e., application; See col. 6, lines 16-18 and 23-41) into a receiver/decoder (i.e., AVI receiver/signal decoder; See Fig. 1 and Abstract), and said software associated with said at least one loader (See col. 2, lines 43-49), said at least one loader being divided into a plurality of modules (i.e., a plurality of code modules) and said software associated with said at least one loader being divided into a respective plurality of modules (i.e., a plurality of associated data modules to said code modules; See col. 1, line 53 through col. 2, line 24). Menand'213 does not expressly teach said software is in native code (i.e., hardware specific code, which is directly executable by a microprocessor).

Steinberg discloses a method for configuring a camera through external means (Fig. 1), wherein said

method sets a software (an operating system of a camera) through transmitter and receiver (external

means), i.e., downloading a native code (i.e., an executable code) for redoing a firmware (i.e., patching

firmware; See col. 1, lines 61-64; i.e., wherein in fact that said method sets an operating system of a

camera through an external means, i.e., downloading an executable code for redoing a firmware clearly

anticipates that said software (i.e., downloaded to said receiver/decoder) is in native code (i.e., directly

executable code by Processor 122 of Fig. 4 as a new operating system)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have applied said method of downloading in native code, as disclosed by Steinberg, to said

receiver/decoder system, as disclosed by Menand'213, so as to provide the capability of changing said

software (i.e., camera operating system) and downloading said software in native code (i.e., executable

code; See Steinberg, col. 2, lines 47-50) with the advantage of allowing said software in said bitstream

(i.e., application) to execute faster than if each byte in said bit stream must interpreted and executed at

run-time, which is well know to one of ordinary skill in the art at the time the invention was made, as

shown in Pedersen [US 5,961,586 A] as a prior art of back-up reference (See Pedersen, col. 11, lines 6-7

and lines 11-13).

Referring to claim 1, the method steps of claim 1 are inherently performed by the apparatus of

claim 20, and therefore the rejection of claim 20 applies to claim 1.

Referring to claim 2, the method steps of claim 2 are inherently performed by the apparatus of

claim 21, and therefore the rejection of claim 21 applies to claim 2.

Referring to claims 9 and 46, the method steps of claims 9 and 46, respectively, are inherently

performed by the apparatus of claim 27, and therefore the rejection of claim 27 applies to claims 9 and 46.

Referring to claim 43, the method steps of claim 43 are inherently performed by the apparatus of

claim 39, and therefore the rejection of claim 39 applies to claim 43.

Referring to claim 51, the method steps of claim 51 are inherently performed by the apparatus of claim 31, and therefore the rejection of claim 31 applies to claim 51.

7.   Claims 3, 4, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213 [EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20, 21, 26, 27, 31, 39, 43, 46 and 51 above, and further in view of Bowen et al. [US 5,367,571 A; hereinafter Bowen].

Referring to claims 22 and 23, Menand'213, as modified by Steinberg, discloses all the limitations of claims 22 and 23 respectively except that does not teach said receiver/decoder further comprising a non-volatile memory, which is a Flash memory volume.

Bowen discloses a subscriber terminal, wherein a non-volatile memory (i.e., FLASH EPROM 134 of Fig. 7), which is a Flash memory volume (See col. 7, lines 54-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted said non-volatile Flash memory volume, as disclosed by Bowen, for said storage means (i.e., RAM read/write memory), as disclosed by Menand'213, as modified by Steinberg, for the advantage of saving a lot of time being spent re-downloading data since it is not necessary for said receiver/decoder to download again said data after said receiver/decoder is off and on thanks to said non-volatile Flash volume, which keeps said data under said non-volatile condition, which is a common sense to one of ordinary skill in the art at the time the invention was made.

Menand'213, as modified by Steinberg and Bowen, discloses said non-volatile Flash memory volume (i.e., FLASH EPROM 134 of Fig. 7; Bowen) stores said downloaded data loader after said software (i.e., application in native code; See Menand'213, col. 6, lines 16-18 and 23-41; See Steinberg, col. 1, lines 61-64) has been downloaded from said bitstream.

Referring to claim 3, the method steps of claim 3 are inherently performed by the apparatus of claim 22, and therefore the rejection of claim 22 applies to claim 3.

Referring to claim 4, the method steps of claim 4 are inherently performed by the apparatus of claim 23, and therefore the rejection of claim 23 applies to claim 4.

8.   Claims 6 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213 [EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20, 21, 26, 27, 31, 39, 43, 46 and 51 above, and further in view of Bestler et al. [US 5,608,732 A; hereinafter Bestler].

Referring to claim 25, Menand'213, as modified by Steinberg, discloses all the limitations of claim 25 except that does not teach said downloaded loader is adapted to replace a portion only of said software stored in said receiver/decoder by a corresponding portion of said software downloaded thereby. Bestler discloses an television distribution system, wherein a loader (i.e., download executive 23 of Fig. 1) is adapted to replace (i.e., update) a portion only of an software (i.e., data) stored (See col. 13, lines 14-16; wherein in fact that a series of packets which are to be processed to download a particular record set implies said downloaded loader (i.e., download executive) replaces (i.e., download for updating) a portion only (i.e., particular record set) of a software (i.e., data) stored (i.e., record set)) in a receiver/decoder (i.e., Cable system 10 comprising headend 11 and decoder 12 in Fig. 1) by a corresponding portion of said software (i.e., data) downloaded (See col. 13, lines 32-35) thereby (See col. 13, lines 14-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said data updating feature, as disclosed by Bestler, in said downloaded data loader, as disclosed by Menand'213, as modified by Steinberg, for the advantage of saving a lot of time being spent downloading data since said data updating feature supports downloading a necessary portion of data instead of a full set of data, which is a common sense to one of ordinary skill in the art at the time the invention was made.

Referring to claim 6, the method steps of claim 6 are inherently performed by the apparatus of claim 25, and therefore the rejection of claim 25 applies to claim 6.

9. Claims 29 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213

[EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20, 21, 26, 27, 31,

39, 43, 46 and 51 above, and further in view of Metz et al. [US 5,666,293; cited by the Applicant;

hereinafter Metz].

Referring to claim 29, Menand'213, as modified by Steinberg, discloses all the limitations of

claim 29 except that does not teach a directory version identification.

Metz discloses a downloading means (i.e., means for downloading operating system software; See

Abstract) is arranged to determine whether a directory version identification (i.e., operating system

version number) of a currently transmitted directory table (i.e., operating system broadcast on the

network; See col. 9, line 61) is more recent than (i.e., differs from; See col. 9, line 66) said directory

version identification of a previously downloaded directory table (i.e., currently running operating

system; See col. 9, lines 62-63) having the same TID (i.e., the particular type set-top terminal; See col. 9,

lines 56-58) as said currently transmitted directory table (See col. 9, line 65 through col. 10, line 1), and if

not (i.e., the same as; See col. 9, lines 61-62), to abort said downloading of said loader (i.e., operating

system; See col. 9, lines 60-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have included said version control, as disclosed by Metz, in said directory/code module

upgrading, as disclosed by Menand'213, as modified by Steinberg, for the advantage of obviating an

unnecessary upgrading said modules so as to use said receiver/decoder downloading bandwidth

effectively, which is well known to one of ordinary skill in the art of computer at the time the invention

was made.

Referring to claim 49, the method steps of claim 49 are inherently performed by the apparatus of

claim 29, and therefore the rejection of claim 29 applies to claim 49.

10.   Claims 28, 47, 48 and 50 rejected under 35 U.S.C. 103(a) as being unpatentable over

Menand'213 [EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20,

21, 26, 27, 31, 39, 43, 46 and 51 above, and further in view of Menand et al. [EP 0 680 216 A2; cited by

the Applicant; hereinafter Menand'216].

Referring to claim 28, Menand'213, as modified by Steinberg, discloses all the limitations of

claim 28 including said downloading means (i.e., system loader; Menand'213) is arranged to download a

directory table (i.e., a directory module; See Menand'213, col.2, lines 36-40) except that does not teach

said downloaded directory table having a predetermined TID and containing, for each of a plurality of

version identifications of a receiver/decoder, a respective TID associated with that version identification.

Menand'216 discloses a method for formulating an interactive TV signal, wherein a directory table (i.e.,

directory module; See TABLE II in Fig. 6) having a predetermined TID (i.e., application identifier; AID

in Fig. 6) and containing, for each of a plurality of version identifications (i.e., module version numbers in

Fig. 6) of a receiver/decoder (i.e., interactive TV system in Fig. 1), a respective TID (i.e., application

identifier) associated with that version identification (See Fig. 6 and page 5, lines 53-58), to determine

said version identification of said receiver/decoder (See page 5, lines 39-40), and to download a directory

table (i.e., directory module) having a TID associated with a version number of said receiver/decoder (See

page 5, lines 40-41) and a predetermined TID-extension (i.e., module identifier; See TABLE II in Fig. 6

and page 5, lines 41-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have included said predetermined TID and said version identifications in said directory table, as

disclosed by Menand'216, in said directory table, as disclosed by Menand'213, as modified by Steinberg,

so as to update said downloaded modules responsive to detecting a change in said data version

identification (i.e., module version number; See page 5, lines 39-41 in Menand'216).

Referring to claims 47 and 48, the method steps of claims 47 and 48, respectively, are inherently performed by the apparatus of claim 28, and therefore the rejection of claim 28 applies to claims 47 and 48, respectively.

Referring to claim 50, Menand'213, as modified by Steinberg, discloses all the limitations of claim 50 except that does not teach a software version identification of said software in said bitstream. Menand'216 discloses a method for formulating an interactive TV signal, wherein a formulated bitstream (i.e., packet stream) includes a data version identification (i.e., module version number; See Fig. 5 and 6) of a data (i.e., module).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said data version identification, as disclosed by Menand'216, in said bitstream of said data, as disclosed by Menand'213, as modified by Steinberg, so as to update a downloaded executing application responsive to detecting a change in said data version identification (i.e., module version number; See Menand'216, page 5, lines 39-41).

Menand'213, as modified by Steinberg and Menand'216, discloses determining, at said receiver/decoder, whether said software version identification of received software is more recent than said software version identification of currently stored software (See Menand'216, page 5, lines 39-40); and downloading said received software from said bitstream data if said received software is more recent (See Menand'216, page 5, lines 40-41).

11.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213 [EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] and Menand'216 [EP 0 680 216 A2] as applied to claims 28, 47, 48 and 50 above, further in view of Hearing [US 5,787,017 a].

Referring to claim 13, Menand'213, as modified by Steinberg and Menand'216, discloses all the limitations of claim 13 except that do not teach said version identification comprises a code for the version of said receiver/decoder and a code for the manufacturer of said receiver/decoder.

Hearing discloses a data acquisition apparatus, wherein it displays an version identification (i.e.,

identification message) comprises a code for the version of said receiver/decoder (i.e., version number of

said apparatus) and a code for the manufacturer of said receiver/decoder (i.e., name of manufacturer).

Refer to col. 4, lines 60-63.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have included said identification message, as disclosed by Hearing, in said version identification,

as disclosed by Menand'213, as modified by Steinberg and Menand'216, so as to provide an abundant

information on said version identification for a better version control, which is a well-known in the art of

production version control.

12.   Claims 34, 35 36, 44, 45, 52 and 53 rejected under 35 U.S.C. 103(a) as being unpatentable over

Menand'216 [EP 0 680 216 A2] in view of Menand'213 [EP 0 680 213 A2] and Steinberg [US 6,006,039

A].

        Referring to claim 52, Menand'216 discloses a transmission system (i.e., interactive TV system in

Fig. 1) comprising: means for transmitting (See page 4, lines 16-17) a bit stream (i.e., signal stream; See

Fig. 8,9 and page 4, line 24) including at least one loader (i.e., interactive application; See page 3, lines

18-19); and means for dividing (See page 3, lines 19-22) said at least one loader (i.e., interactive

application) into a plurality of modules (i.e., modules; See page 3, lines 33-34) and dividing said software

(i.e., interactive component data; See page 3, line 35) associated with said at least one loader into a

respective plurality of modules (i.e., application data module; See page 3, line 33) for transmittal by said

transmitting means (e.g., satellite transponder; See page 4, lines 16-17).

Menand'216 does not disclose said at least one loader for loading an application into a receiver/decoder.

Menand'213 discloses a loader (i.e., autostart module; See col. 2, lines 40-43 and col. 7, lines 42-50) for

loading an application (See col. 6, lines 16-18 and 23-41) into a receiver/decoder (See col. 2, line 36

through col. 3, line 2 and col. 7, lines 28-53), and said software associated with said at least one loader

(i.e., a plurality of associated data modules to said code modules; See col. 1, line 53 through col. 2, line 24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said loader, as disclosed by Menand'213, in said interactive application, as disclosed by Menand'216, so as to load an associated application from said bitstream into said receiver/decoder (See Menand'213, col. 7, lines 46-51).

Menand'216, as modified by Menand'213, does not expressly teach said software is in native code (i.e., hardware specific code, which is directly executable by a microprocessor).

Steinberg discloses a method for configuring a camera through external means (Fig. 1), wherein said method sets a software (an operating system of a camera) through transmitter and receiver (external means), i.e., downloading a native code (i.e., an executable code) for redoing a firmware (i.e., patching firmware; See col. 1, lines 61-64; i.e., wherein in fact that said method sets an operating system of a camera through an external means, i.e., downloading an executable code for redoing a firmware clearly anticipates that said software (i.e., downloaded to said receiver/decoder) is in native code (i.e., directly executable code by Processor 122 of Fig. 4 as a new operating system)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied said method of downloading in native code, as disclosed by Steinberg, to said receiver/decoder system, as disclosed by Menand'216, as modified by Menand'213, so as to provide the capability of changing said software (i.e., camera operating system) and downloading said software in native code (i.e., executable code; See Steinberg, col. 2, lines 47-50) with the advantage of allowing said software in said bitstream (i.e., application) to execute faster than if each byte in said bit stream must interpreted and executed at run-time, which is well know to one of ordinary skill in the art at the time the invention was made, as shown in Pedersen [US 5,961,586 A] as a prior art of back-up reference (See Pedersen, col. 11, lines 6-7 and lines 11-13).

Referring to claim 35, Menand'216 discloses means for generating a directory table (i.e., directory module; See page 5, lines 51-58) having a predetermined table identification ("TID"; Application Identifier AID; See Fig. 6 and page 5, lines 54-55) and containing, for each of a plurality of version identifications (i.e., module version numbers in Fig. 6) of a receiver/decoder (i.e., interactive TV system in Fig. 1), a respective TID (i.e., application identifier) associated with that version identification (See Fig. 6 and page 5, lines 53-58).

Referring to claim 36, Menand'216 discloses means for including in each transmitted table (i.e., module) a version identification (i.e., module version number; See Fig. 5,6; therefore (See page 5, lines 39-40).

Referring to claim 53, Menand'216 discloses means for formatting each of said modules of said at least one loader as a respective table (i.e., directory module; See TABLE II in Fig. 6 and page 5, lines 51-54), said table of said at least one loader having the same respective table identification ("TID"; Application Identifier AID; See Fig. 6 and page 5, lines 54-55) and respective different table identification extension ("TID-extension"; i.e., module identification for code/data module; See Module Identifier in Fig. 5,6);and means for formatting each of said modules of said software associated with said at least one loader (See page 3, lines 32-35) as a respective table (See TABLE II "respective table for each module" in Fig. 6), said tables of said loader modules associated therewith (See page 5, lines 56-57) and respective different TID-extensions (i.e., module identification for code/data module).

Referring to claim 34, Menand'216, as modified by Menand'213 and Steinberg, discloses said tables have respective different TID-extensions (i.e., service component identifications for respective transport packets in the transmission unit header; See Menand'216, page 3, lines 19-35 and page 7, lines 1-4) other than a predetermined TID-extension (i.e., module identification for code/data module; See Menand'216, Module Identifier in Fig. 5 and Fig. 6); said system further comprising a respective directory tables (i.e., directory module; Menand'216) for said plurality of modules having the same TID

(i.e., the same directory module identification; See Menand'213, col. 14, lines 41-44), each directory table

having that TID (i.e., AID; See Menand'216, Fig. 6) and said predetermined TID-extension (i.e., module

identification for code/data module; Menand'216), said directory table (i.e., directory module;

Menand'216) containing for each of said modules a name of that module (i.e., string table for module

names; Menand'216) and the respective TID-extension (i.e., module identifier; See Menand'216, Fig. 6

and page 5, lines 53-58).

Referring to claim 44, the method steps of claim 44 are inherently performed by the apparatus of

claim 53, and therefore the rejection of claim 53 applies to claim 44.

Referring to claim 45, the method steps of claim 45 are inherently performed by the apparatus of

claim 34, and therefore the rejection of claim 34 applies to claim 45.

Response to Arguments

13.   Applicant's arguments filed on 6th of October 2003 (hereinafter the Response) have been fully

considered but they are not persuasive.

*In response to the Applicant's argument with respect to **Autostart Module Not a Loader*** on the

Response pages 10-11, the Examiner respectfully disagrees. In contrary to the Applicant's statement,

Menand'213 suggests the subject matter "downloading a loader for loading software", i.e., downloading

means (i.e., system loader; See col. 2, line 37) for downloading into said storage means (i.e., RAM

read/write memory 412 of Fig. 1) a loader (i.e., autostart module; See col. 2, lines 40-43 and col. 7, lines

42-50) for loading said software from said bitstream (See col. 2, line 36 through col. 3, line 2 and col. 7,

lines 28-53). In fact, Menand'213 teaches that "system loader" loads "autostart module" into the memory

RAM, and the loaded "autostart module" loads other code and data module (See col. 2, lines 43-52).

Furthermore, Menand'213 teaches that API (Application Programming Interface), which is basically a list

of subroutines available to an application program and the information necessary to call them, is

published and may be used by the application programmer to access the decoder elements (See Col. 6,

lines 36-41). Thus, even if the Applicant alleges that ultimately the interpreter or system loader initiates the API calls, which load other code or data modules, not the AVI program, and certainly not the autostart module (See the Response, page 11, lines 14-16), one of the ordinary skill in the art cannot accept that the API calls is "loader" because (1) the loaded "autostart module" loads other code and data module, which is disclosed by Menand'213 at col. 2, lines 43-52, (2) Menand'213 does not mention the API calls is "loader" at all, and (3) the Applicant's allegation is based on the subjective interpretation of Applicant's, not on the objective interpretation of one of the ordinary skill in the art, for example, a "loader" is a program composed by API calls to load other code and data module. Thus, the Applicant's argument on this point is not persuasive.

*In response to the Applicant's argument with respect to **Native v. Intermediate Code*** on the Response pages 11-12, the Examiner believes that the Applicant misinterprets the claim rejection. The Applicant essentially argues that Menand'213 teaches away from using native code. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the method of downloading in native code, as disclosed by Steinberg, to said receiver/decoder system, as disclosed by Menand'213, since it would allow to execute faster than interpretation method, as evidenced by Pedersen, at col. 11, lines 6-7 and 11-13. (See paragraph 6 of the instant Office Action, claim rejection under 35 U.S.C. 103(a) as being unpatentable over Menand'213 in view of Steinberg). Therefore, in contrary to the Applicant's statement, Menand'213, as modified by Steinberg, suggests using native code as required by claims 1, 20 and 39. Furthermore, the Examiner has clearly pointed out rationale for appropriate combination of the references. Thus, the Applicant's argument on this point is not persuasive.

In response to the Applicant's argument that **Steinberg** is nonanalogous art on the Response pages 12-14, it has been held that a prior art reference must either be in the field of Applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977

F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Applicant's claimed invention relates to a receiver/decoder in a digital transmission system (See Application page 1), and Steinberg discloses a method and apparatus for configuring a digital camera through external means (e.g., personal computer). Therefore, the Examiner relies on the Steinberg reference for the consideration of the downloading mechanism in native code under the digital environment, which could be utilized in other inventions, such that the receiver/decoder in a digital transmission system, and the Steinberg reference is pertinent to the Applicant's invention because it deals with digital data transmission. Thus, the Applicant's argument on this point is not persuasive.

*In response to the Applicant's argument with respect to **Bowen, Bestler, Metz, Manand'216,** Hearing* on the Response pages 14-17, the Examiner believes that the Applicant misinterprets the claim rejection. The Applicant essentially argues that any one of the references Bowen, Bestler, Metz, Manand'216, Hearing doesn't teach a downloading a loader in native code, which, in turn, downloads software in native code. However, Menand'213, as modified by Steinberg, suggests downloading a loader in native code as required by claims 1, 20 and 39, and their dependent claims are suggested by the appropriate combination of prior art of the record, such that Bowen, Bestler, Metz, Manand'216 and Hearing, with rationale, respectively. Thus, the Applicant's argument on this point is not persuasive.

Conclusion

14.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX

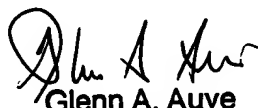MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Christopher E. Lee whose telephone number is 703-305-5950. The examiner can normally

be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark

H. Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this

application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the receptionist whose telephone number is 703-305-3900.

Christopher E. Lee
Examiner
Art Unit 2189

cel/

Glenn A. Auve
Primary Patent Examiner
Technology Center 2100